

Community Water Fluoridation



"...one of the 10 great public health achievements of the twentieth century."¹



Oral Health in Massachusetts: A Fact Sheet

What is the public health issue?

Oral health is integral to general health.² Although preventable, tooth decay is a chronic disease affecting all age groups. In fact, it is the most common chronic disease of childhood.² The burden of disease is far worse for those who have limited access to prevention and treatment services. Left untreated, tooth decay can cause pain and tooth loss. Among children, untreated decay has been associated with difficulty in eating, sleeping, learning, and proper nutrition.³ Among adults, untreated decay and tooth loss can also have negative effects on an individual's self-esteem and employability.

In the U.S., tooth decay³ affects:

- ✓ 1 in 4 elementary school children
- ✓ 2 out of 3 adolescents
- ✓ 9 out of 10 adults

What is the impact of fluoridation?

Fluoride added to community drinking water at a concentration of 0.7 to 1.2 parts per million has repeatedly been shown to be a safe, inexpensive, and extremely effective method of preventing tooth decay.² Because community water fluoridation benefits everyone in the community, regardless of age and socioeconomic status, fluoridation provides protection against tooth decay in populations with limited access to prevention services. In fact, for every dollar spent on community water fluoridation, up to \$42 is saved in treatment costs for tooth decay.⁴ The Task Force on Community Preventive Services, a national, independent, nonfederal, multidisciplinary task force appointed by the director of the Centers for Disease Control and Prevention (CDC), recently conducted a systematic review of studies of community water fluoridation. They found that, in communities that initiated fluoridation, the decrease in childhood decay was almost 30 percent over 3–12 years of follow-up.³

How is Massachusetts doing?

In 2003, almost 50 percent of Massachusetts third-graders had experienced tooth decay and 26% had untreated tooth decay.⁷ In 2006, nearly 40 percent of Massachusetts residents 65 and older were missing six or more teeth.⁸ In 2007, 63 percent of Massachusetts residents on public water systems received fluoridated water.⁸

Related U.S. Healthy People 2010 Objectives⁵

- ✓ Seventy-five percent of the population on public water will receive optimally fluoridated water.
 - 63% of Massachusetts residents receive the dental benefits of community water fluoridation.
- ✓ Reduce to 20% of adults age 65+ years who have lost all their teeth.
 - 39.6% of Massachusetts adults between the ages of 65 and 74 have six teeth or more missing.
- ✓ Reduce tooth decay experience in children under 9 years old to 42%.
 - In Massachusetts, 48.2% of 3rd graders have experienced tooth decay.

What is Massachusetts doing?

Newly fluoridated Massachusetts communities providing the health and economic benefit of fluoridation to more than 161,000 residents:

- 2002-North Attleboro
- 2007-New Bedford
- 2007-Acushnet
- 2007-Dartmouth

Strategies for Massachusetts' Future

- ✓ Educate and empower the public regarding the benefits of fluoridation
- ✓ Encourage fluoride supplements for children at increased risk for decay who are not receiving fluoridated drinking water
- ✓ Educate participation by schools in the state's school-based fluoride mouthrinse program
- ✓ Educate and promote the use of school-based prevention (dental sealant) programs
- ✓ Use fluoride toothpaste at least twice-a-day

References

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